CSCI 361: Reading Assignment # 13

Your Name: _____

Due: Thursday, Nov 14, in class

Assigned reading for this lecture:

- Sipser Third Edition 7.3 and 7.4 (NP and NP Completeness)

Review the class NP as well as NP completeness reductions in the book. Skip the proof of the Cook-Levin Theorem (Theorem 7.37) for now, we will cover it next time. Read the reduction from 3SAT to Clique, (Theorem 7.32) and 3SAT to Vertex-Cover (Theorem 7.44).

Questions:

1. Consider the reduction from 3SAT to Clique (Page . Given a 3SAT instance with k clauses, how many vertices are in the constructed graph G?

2. Consider the reduction from 3SAT to Clique (Page 302). Given a 3SAT instance with k clauses, how many edges are in the constructed graph G?